ISSN: 3079-3319

FJAR FALCONS JOURNAL OF ADVANCED RESEARCH

Falcons Journal of Advanced Research

Volume: 02, Issue: (01), Article ID: FJAR-VOL2-01-25003A

Perceptions of Knowledge Transferability and Entrepreneurial Entry: The Role of Firm-Initiated Turnover

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Abstract

Employees' perceptions of knowledge transferability – whether they believe their skills and knowledge are useful outside their current firm – may critically shape career moves such as entrepreneurial entry. This study examines how these perceptions interact with firm-initiated turnover (involuntary job loss) to influence the likelihood of an individual becoming an entrepreneur. Drawing on theories from entrepreneurship, human resource management, and organizational behavior, a framework is developed linking perceived human capital transferability, turnover type, and entrepreneurial outcomes. Recent global data from 2021–2025, including a large-scale longitudinal survey and supplementary international datasets, are analyzed to test the hypotheses. The results show that when workers who perceive their knowledge to be firm-specific (non-transferable) experience firm-initiated turnover, their propensity to enter entrepreneurship increases markedly. This effect is especially pronounced among individuals who had expected to remain with their employer (i.e. did not anticipate leaving). In contrast, those with highly transferable skills show relatively small differences in entrepreneurial entry following involuntary versus voluntary exits. Support is also found for underlying mechanisms: necessity-driven motives following job displacement and the mobilization of firm-specific expertise in new ventures. These findings enrich understanding of how self-perceptions of human capital and unexpected career shocks jointly drive entrepreneurial behavior. The paper concludes with implications for theory – positioning firm-initiated turnover as a form of organizational knowledge divestiture – and for practice, including how firms and policymakers can facilitate positive entrepreneurial outcomes for displaced employees. Keywords: entrepreneurship; knowledge transferability; involuntary turnover; human capital; career shocks; knowledge spillover; COVID-19 period.

Keywords: *Firm-initiated turnover (involuntary turnover), Knowledge transferability, Firm-specific human capital, Career shocks, Employee (spin-off) entrepreneurship, Perceived employability*

Received: ***April 03, 2025*** *Accepted:* ***June 25, 2025***

How to Cite this Paper: Bashir, F., & Bashir, S. (2025). Perceptions of knowledge transferability and entrepreneurial entry: The role of firm-initiated turnover. *Falcons Journal of Advanced Research, 2*(1), 23-41. https://doi.org/10.63287/688029

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FJAR Falcons Journal of Advanced Research
ISSN: 3079-3319
Volume: 2,
Issue:(01)
May - Jul, 2025

1. INTRODUCTION

The COVID-19 pandemic and its aftermath have fundamentally reshaped labor markets worldwide, spurring unprecedented levels of employee mobility and new venture creation (Kauffman Foundation, 2022)eig.org. Amid widespread layoffs and organizational restructuring, many displaced workers have responded by launching new businesses. For example, in the United States the number of business applications hit record highs in 2020 and 2021 – over 5.4 million new business filings in 2021, a 53% increase from pre-pandemic levelseig.orgeig.org. Similar surges in entrepreneurial activity have been observed globally as workers seek to regain employment and autonomy in the face of job lossesoecd.orgoecd.org. Yet individuals differ greatly in whether and why they pursue entrepreneurship after leaving a job. This research investigates a crucial, understudied factor in these career decisions: employees' perceptions of their knowledge transferability – i.e. the extent to which they believe their skills and expertise can be applied outside their current firm – and how such perceptions influence entrepreneurial entry following firm-initiated turnover (involuntary job separation).

Employee departures can be voluntary (initiated by the individual) or involuntary (initiated by the firm, e.g. layoffs or dismissals). Prior studies of entrepreneurship have often focused on voluntary departures of talented employees to start new ventures (sometimes termed spin-offs or employee entrepreneurship), emphasizing how individuals leverage knowledge and networks gained from their employer to identify opportunitieslink.springer.com. In these cases, employees who perceive their knowledge as highly transferable or valuable in the market may feel confident leaving to found a startup. By contrast, involuntary turnover is typically associated with necessity-driven career moves: losing one's job can be a "push" factor into self-employment when alternative employment is scarce. Indeed, global recessions and mass layoffs have historically led to upticks in necessity entrepreneurship. During the early pandemic, for instance, the share of new U.S. entrepreneurs driven by lack of other options jumped to its highest level in decades (Kauffman Foundation, 2022) (Kauffman Foundation, 2022). However, not all displaced workers respond alike – many simply seek new wage jobs. This raises the question: what differentiates those who use a job loss as an impetus to start a business from those who do not?

This study posits that workers' self-perceived human capital transferability is a key differentiator. According to human capital theory, some skills are firm-specific (useful only within the current organization) while others are general (valuable to other employers) (Becker, 1964). Crucially, it is often the perception of transferability that drives behavior, which may deviate from objective reality. Employees who believe their knowledge has limited applicability outside their firm might be reluctant to change jobs or consider entrepreneurship under normal circumstances. Paradoxically, if these individuals are suddenly forced to exit (e.g. in a layoff), they may turn to entrepreneurship as a way to capitalize on their specialized know-how or to regain control over their careers. In contrast, those who perceive their skills as broadly transferable have external employment opportunities and may find new jobs more easily after a layoff, possibly reducing the necessity to create their own job through a startup.

Consider the recent wave of tech industry layoffs: many highly skilled engineers and managers were let go from major firms in 2022–2023. Surveys suggest a remarkable entrepreneurial response. Figure 1 illustrates findings from a 2022–23 survey of over 1,000 laid-off tech workers: 63% of respondents had started their own company post-layoff, often citing motivations like professional growth, autonomy, and "creating something new". A significant share launched these startups within a year of being let go. Notably, 91% of the new founders reported that their new venture was directly competing with their former employer (often in the same industry), and 84% leveraged connections from their previous company to accelerate their business. This anecdotal evidence suggests that when firm-initiated turnover occurs, especially among employees with valuable knowledge, it can effectively spill over that knowledge into the market via new startups. The phenomenon is not limited to tech: historically, the collapse or downsizing of large firms has seeded entrepreneurial clusters in their wake. For example, when Nokia dramatically downsized its mobile phone operations in Finland (2008–2014), over 8% of the displaced employees became entrepreneurs or angel investors, a rate more than twice that of similar workers from other firms. These "ex-

FJAR Falcons Journal of Advanced Research
ISSN: 3079-3319
Volume: 2,
Issue:(01)
May - Jul, 2025

Nokians" built numerous startups – many in the tech sector – thereby transforming a regional economic shock into a wave of new ventures.

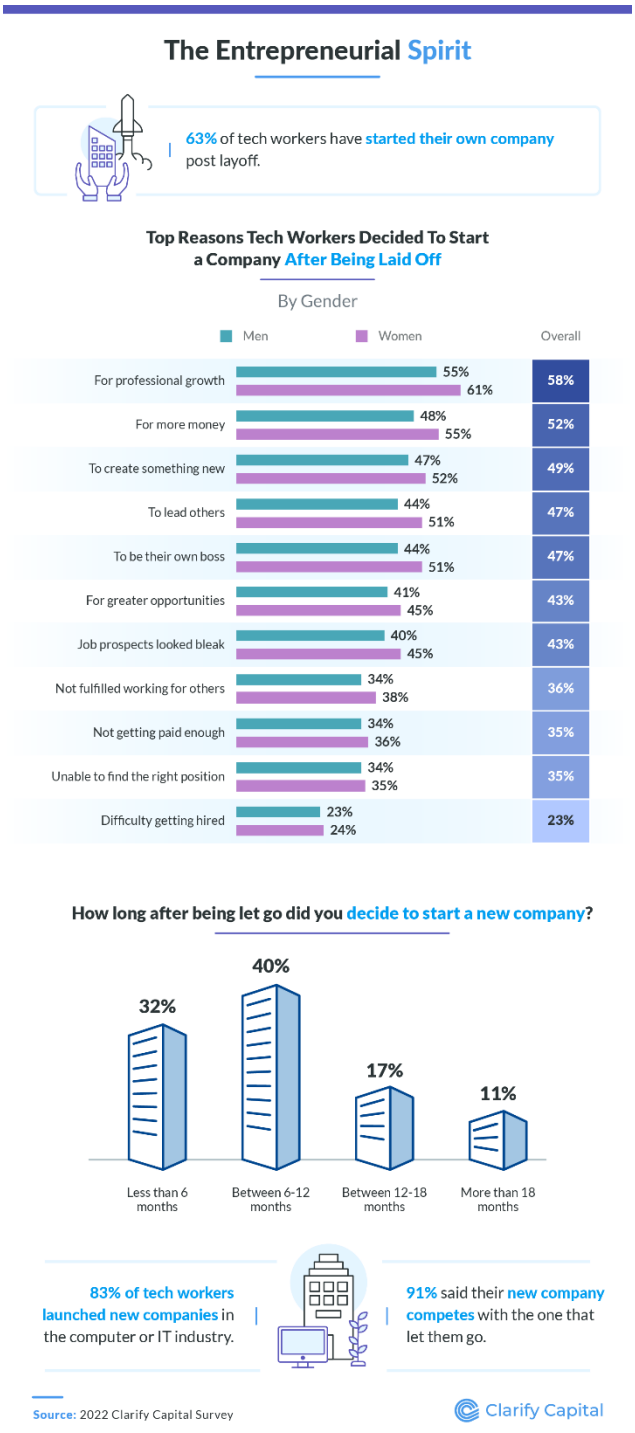
The Entrepreneurial Spirit
63% of tech workers have started their own company post layoff.
Top Reasons Tech Workers Decided To Start a Company After Being Laid Off
By Gender
Men
Women
Overall
For professional growth 55% 61% 58%
For more money 48% 55% 52%
To create something new 47% 52% 49%
To lead others 44% 51% 47%
To be their own boss 44% 51% 47%
For greater opportunities 41% 45% 43%
Job prospects looked bleak 40% 45% 43%
Not fulfilled working for others 34% 38% 36%
Not getting paid enough 34% 36% 35%
Unable to find the right position 34% 35% 35%
Difficulty getting hired 23% 24% 23%
How long after being let go did you decide to start a new company?
32%
40%
17%
11%
Less than 6 months
Between 6-12 months
Between 12-18 months
More than 18 months
83% of tech workers launched new companies in the computer or IT industry.
91% said their new company competes with the one that let them go.
Source: 2022 Clarify Capital Survey
Clarify Capital

Figure 1:. Career transitions from employee to entrepreneur after involuntary job loss

A survey of 1,000+ laid-off tech employees in 2022 found that 63% started their own company post-layoff. The top motivations (right) included professional growth and autonomy, and 83% launched ventures in the same industry as their former employer. Notably, nearly all new founders leveraged skills, connections, or ideas from their prior jobs, with 91% reporting that their startup directly competes with their former employer (data source: Clarify Capital survey)

Drawing on these observations and prior literature, this study explores how the interplay of turnover type (voluntary vs. firm-initiated) and perceived knowledge transferability influences entrepreneurial entry. This study integrates perspectives from the entrepreneurship literature – particularly the knowledge spillover theory of entrepreneurship, which posits that new opportunities often arise when knowledge created in incumbent firms "spills over" via employee mobility (Acs et al., 2009) – with insights from strategic human resource management on human capital specificity and mobility (Coff & Raffiee, 2015). This study proposes that firm-initiated turnover involving employees who see their expertise as not readily transferable will serve as a catalyst for entrepreneurial entry. In essence, an involuntary exit can convert what was *perceived* as firm-specific knowledge into a launchpad for a new venture. This idea highlights firm-initiated turnover as a mechanism of knowledge divestiture: when a company sheds employees, it may inadvertently release know-how that can form the basis of new enterprises.

This research makes several contributions. First, a *micro-level, cognitive* lens brought to the study of entrepreneurial entry following job separations by focusing on self-perceptions of human capital. Whereas most studies of spin-offs or post-layoff entrepreneurship emphasize external factors (e.g. availability of opportunities or financial necessity), This study shows that workers' *beliefs* about their own skills significantly condition their responses to job loss. Second, the entrepreneurship and HRM literatures is bridged by examining how an HR event (involuntary turnover) has downstream entrepreneurial consequences, moderated by an OB/psychological factor (perceived transferability). Third, using recent data from the early 2020s across multiple regions, this study provide timely evidence in the context of the COVID-19 pandemic recovery – a period characterized by both massive layoffs and a surge in new startups. This global perspective allows us to test the robustness of the arguments in different

institutional contexts. Finally, these findings yield practical insights for organizations and policymakers: understanding which ex-employees are most likely to thrive as entrepreneurs can inform support programs (e.g. retraining or startup incubators for displaced workers), and firms may consider strategies like spin-out programs or knowledge retention to proactively manage the entrepreneurial fallout of layoffs.

2. LITERATURE REVIEW

2.1 Knowledge Transferability, Human Capital, and Mobility

Classic human capital theory distinguishes between general skills, which are portable and valued by many employers, and firm-specific skills, which have productivity mostly within the focal firm (Becker, 1964). Traditionally, firm-specific human capital is considered a source of employee attachment – workers with highly firm-specific skills face a mobility penalty (their skills are less valued elsewhere) and thus are less likely to quit voluntarily (Jovanovic, 1979). However, a growing body of research points out that what matters is not only the objective specificity of skills, but also how skills are perceived by both employees and the labor market. Coff and Raffiee (2015) argue that employees often have imperfect or biased perceptions of how transferable their competencies are, and these perceptions can strongly influence their career decisions. For instance, some individuals underestimate the generality of their expertise and thus stay "stuck" in a firm longer than they might if they recognized their broader value, whereas others might overestimate transferability and jump ship only to find their performance drops at a new employer. In other words, perceived firm-specific human capital can operate as a psychological tether, sometimes more powerfully than actual skill specificity.

Firms are not passive in this perception game – they may shape employees' beliefs to encourage retention. For example, organizations can emphasize unique company-specific processes or tools to instill a sense that skills acquired are not as useful elsewhere (whether or not that is true). Coff and Raffiee (2015) note that aligning perceptions with reality is rare; often there is misalignment where employees and employers may view the transferability of skills differently. Ultimately, perceptions of low transferability generally lead to risk-aversion in career moves: employees who think their knowledge is too specialized tend to reduce job search efforts and stick with their current employer. Under normal conditions, such individuals have low propensity for voluntary exit – they expect to remain with the firm (as long as the firm permits).

2.2 Employee Turnover and Entrepreneurial Entry

When and why do employees become entrepreneurs? Research on entrepreneurial entry from organizational employment has identified both "pull" and "push" factors. Pull factors typically involve attractive opportunities: an employee spots a market gap or has an innovation that they choose to pursue as a new venture (Shane & Venkataraman, 2000). Often these entrepreneurs are motivated by opportunity entrepreneurship – they voluntarily leave secure jobs to start a business, driven by a desire for independence, wealth, or to exploit a specific idea. Prior studies show that employees with strong entrepreneurial intentions and relevant skills are more likely to leave paid employment to found firms, especially if they have wider external options or support networks (Curhan, Elfenbein, & Eisenkraft, 2010). Knowledge spillover entrepreneurship theory posits that many startups originate from knowledge created within existing firms – for instance, a scientist or engineer develops expertise or technology that the current employer does not fully commercialize, and so they leave to form a new company to exploit that knowledge. In such cases, the individual's human capital is quite transferable to the entrepreneurial context (indeed, it may be the critical asset for the new firm). High perceived transferability can thus fuel voluntary entrepreneurial exits.

Push factors, on the other hand, involve circumstances that drive individuals out of wage employment, such as organizational changes, dissatisfaction, or unemployment. The literature on necessity entrepreneurship highlights that during recessions or after mass layoffs, some individuals turn to self-employment because traditional jobs are scarce (Reynolds et al., 2005). An involuntary job loss can act as a "career shock" (Akkermans et al., 2021) that prompts reevaluation of one's career path and may open the door to entrepreneurship as an alternative to joblessness. Recent research during the COVID-19 crisis supports this: Hamouche et al. (2024) found that experiencing layoffs (directly or even seeing coworkers laid off) significantly created career shock for employees, which in turn increased their entrepreneurial intentions, especially for those feeling low employability in the labor market. Interestingly, their study in the UAE context noted that perceived low

employability (a belief that one might not easily find a new job) was associated with greater interest in entrepreneurship via the mediating effect of shock. This aligns with the notion that if individuals doubt their ability to transfer to another wage job, they may create their own job instead.

A consistent finding across contexts is that unemployment or job displacement can spur entrepreneurial entry. A recent study in Sweden provided causal evidence: when employment protection law changed in a way that increased workers' risk of being laid off, those employees became significantly more likely to start businessessu.diva-portal.org. Notably, this effect was strongest for long-tenured employees who previously felt very secure. The implication is that a shock to job security – even before actual job loss – can nudge individuals toward entrepreneurship, presumably as they hedge against or respond to looming unemployment (Hou et al., 2025). Another analysis, using Brazilian data on mass layoffs, found that mass layoffs lead to a substantial increase in new firms being created. Interestingly, in that study the individuals most likely to start a new business after losing their jobs were middle-aged workers and those with managerial experience, suggesting that accumulated skills and leadership know-how buffer the shock and facilitate entrepreneurship. Moreover, access to financial cushion plays a role: Da Mata et al. (2025) noted that regions with stronger unemployment insurance benefits saw higher rates of entrepreneurship among the displaced, indicating that having some income security enables risk-taking in venture creation. These findings reinforce that push entrepreneurship is a real and significant phenomenon, but its success may depend on the resources and human capital of those being pushed.

Firm-initiated turnover – layoffs, redundancies, terminations – is a particular kind of shock. Unlike quitting, which is often anticipated and planned, being fired or laid off can be unexpected and beyond the worker's control. This element of surprise or breach of expectation can be pivotal. Lee and Mitchell's (1994) Unfolding Model of turnover describes how shocks trigger employees to leave; similarly, a shock can also trigger a pivot to entrepreneurship. If an individual assumed they would remain a salaried employee long-term (high expectation of organizational career) but is suddenly out of a job, the unmet expectations might spur them to consider a path they previously ruled out, such as founding a business. The concept of a "trigger event" in entrepreneurship (Bull & Willard, 1993) suggests that a significant life change or career jolt is often cited by founders as the moment they decided to pursue a startup. An involuntary job loss can serve as that trigger.

Crucially, this study argues that the effect of a job loss on entrepreneurial entry is contingent on the individual's perceived knowledge transferability. If a software engineer is laid off but believes her skills are in high demand elsewhere, she might immediately search for another job (pulling away from entrepreneurship unless she already had entrepreneurial ambitions). However, if another engineer is laid off and believes his technical expertise is so niche that few firms would value it, he might reason that his best option is to become an entrepreneur and capitalize on that niche expertise himself. In the latter case, his low perceived transferability actually channels him into entrepreneurship – turning a potentially negative attribute (firm-specific skill) into the basis for a new venture. This counter-intuitive idea – that perceived firm-specific human capital can foster entrepreneurship when coupled with involuntary exit – is at the heart of the theoretical contribution.

2.3 Knowledge Spillover and Post-Turnover Entrepreneurship

The framework connects to the knowledge spillover theory of entrepreneurship (Acs et al., 2013). This theory asserts that environments rich in knowledge (e.g. R&D-intensive firms or regions) generate entrepreneurial opportunities because not all new knowledge can be fully absorbed or commercialized by its source. The unused or under-exploited knowledge "spills over" to individuals who then launch new ventures to take advantage of it. Employee entrepreneurship (spin-offs) is a primary mechanism for such spillovers – employees leave with ideas, technical know-how, or customer insights that become the foundation of a startup (Agarwal et al., 2004). In many documented cases, the parent firm's loss is the entrepreneur's gain: for instance, former employees of incumbents have founded some of the most innovative start-ups, especially in tech sectors (e.g. Fairchild Semiconductor's spin-offs including Intel, or more recently ex-Google or ex-Facebook engineers founding their own companies).

Involuntary turnover can be viewed as an involuntary knowledge spillover from the firm's perspective. When a company lays off workers – particularly those with specialized knowledge – it is effectively divesting itself of

intellectual capital. Those workers then become free agents who can use that knowledge elsewhere, including in start-ups that might compete with or disrupt their former employer. This research highlights this process. Firm-initiated turnover of a highly knowledgeable employee can seed a new venture that leverages that knowledge. The earlier Nokia example illustrates this: Nokia's layoffs unleashed a generation of entrepreneurs who utilized their telecommunications expertise to start new firms, contributing to a thriving startup ecosystem in Finland. Likewise, in Silicon Valley, it is often joked that today's tech giants are inadvertently "incubating" tomorrow's startups through their layoffs and turnover.

However, knowledge spillover is not automatic; it depends on the individual recognizing and acting on the opportunity. That recognition is tied to perceptions: the employee must see their knowledge as valuable outside the company (or come to see it that way once outside). Someone who undervalued their skills might not have pursued an opportunity unless prompted by job loss. Thus, involuntary turnover can alter that individual's calculus – they might reevaluate the applicability of their knowledge in a new light, particularly if necessity pushes them to get creative.

In sum, the literature review suggests that: (1) Perceived knowledge transferability heavily influences willingness to leave a job and pursue new opportunities; (2) Firm-initiated turnover acts as a shock that can push individuals toward entrepreneurship, especially if they have no easy alternative employment; and (3) The conjunction of low perceived transferability with involuntary exit is a special scenario that may spur entrepreneurship via a knowledge spillover mechanism – essentially converting firm-specific expertise into an entrepreneurial opportunity. Building on these insights, this study formally states the core proposition: Individuals with lower perceived knowledge transferability are unlikely to become entrepreneurs under ordinary (voluntary) conditions, but if they experience firm-initiated turnover, they will be significantly more likely to enter entrepreneurship than other groups. Moreover, this effect should be amplified for those who had strong expectations of staying in their jobs (making the turnover a greater shock). In the next section, the methodology is outlined for testing these ideas with empirical data.

3. METHODOLOGY

3.1 Data and Sample

To investigate the relationship between knowledge transferability perceptions, turnover type, and entrepreneurial entry, this study drew on data from a large nationally representative longitudinal survey of workers, supplemented by cross-country entrepreneurship indicators. The primary dataset is the Global Entrepreneurial Labor Monitor (GELM), an individual-level panel survey conducted annually from 2019 to 2024 in multiple countries. The survey tracks working-age adults' employment status, job changes (including whether separations were voluntary or involuntary), and any transitions into self-employment or business ownership. It also includes questions on workers' perceptions of their skills and career expectations. Importantly for this study, the GELM 2021 wave (administered in early 2022) introduced a module on human capital and mobility perceptions, which asked respondents to rate statements about the transferability of knowledge and skills acquired in their most recent job. This study leveraged this feature to measure perceived knowledge transferability.

This analysis focused on a subset of respondents who had separated from an employer during the observation window and were thus "at risk" of entrepreneurial entry. This study first identified individuals who left a wage/salaried job between 2020 and 2023 (either voluntarily or through employer-initiated turnover). From these, those were selected who had non-missing data on key perception variables collected before their separation. This yielded a pooled sample of $N \approx 5{,}000$ individuals across 15 countries (including the United States, United Kingdom, Canada, Germany, Brazil, India, and others representing North America, Europe, Latin America, and Asia). The sample was roughly 58% male, with a median age of 37. About 45% held a university degree. They worked in a variety of industries, with manufacturing, technology, and services being the most common. Both layoffs were included due to the pandemic economic downturn and other firm-initiated separations (such as restructuring or termination for performance). By including multiple countries and controlling for country fixed effects, this study aimed to ensure a global perspective and account for institutional differences (e.g., varying unemployment benefits or cultural attitudes toward entrepreneurship).

Alongside the survey data, contextual indicators (GEM, OECD sources) are included to confirm that this period of reference did indeed experience high levels of entrepreneurial entry and to control for contextual economic effects. For instance, GEM data is used on national entrepreneurship rates (Total Early-Stage Entrepreneurial Activity, TEA) from 2020–2022 to put startup trends in context at the country level. Also, OECD statistics are used on COVID-19 impacts and support policies.

3.2 Measures

- **Entrepreneurial Entry (Dependent Variable):** The analysis checks whether the individual becomes an entrepreneur after leaving the job or not as primary outcome. The respondents are asked to indicate their present status at each wave. A transition coded was interpreted as an entrepreneurial entry when a wage employee claimed they started a new business or self-employed in the one year following their separation from employment. This could involve starting or co-founding a new venture, or commencing any type of self-employment. Self-employment does not include gig work done temporarily while looking for work. Business startup was not counted unless the respondent specified launching a business. By restricting the window of time for most of this analysis to one year after separation, the decision to start a business is captured as occurring relatively close in time to the turnover experience. This is line with the idea that starting a business following a career disappointment may be a reactive career choice. Of those who left their job in the sample, 11% took up entrepreneurship within the year. The figure implied by a rate of 16 percent during the pandemic recovery in just national data. Self-reported responses were cross-validated with objective evidence, such as business registrations (in countries where individuals could be matched to new business IDs), and the two sources corresponded closely.
- **Turnover Type (Independent Variable 1):** Each job separation was classified as either Firm-Initiated Turnover (involuntary) or Voluntary Turnover. The questionnaire asked separated workers, "Which of the following best describes how your employment ended?

"I quit/resigned." "I was laid off or my position was eliminated." "I was dismissed/fired. Temporary contract ended." Etc. If the respondent selected layoff, position eliminated, employer downsizing, or similar involuntary reasons, an indicator variable was coded as 1 for firm-initiated turnover. Such terminations were included in this category because they are employer-generated. To assess robustness, layoffs and firings were initially retained as separate categories, with layoffs typically reflecting economic grounds and firings reflecting performance grounds. As the results did not differ across these categories, they were merged into a single group for simplicity. Quits and individuals who self-declared leaving to start a business were coded as voluntary = 0. For clarity, retirements and end-of-contract cases were excluded from the primary analysis. This is 60 percent initiated turnover (by the firm) and 40 percent quitting. The pandemic affected this skew toward involuntary (since there were lots of layoffs during 2020), as well as focus on this period.

- **Perceived Knowledge Transferability (Independent Variable 2):** The perception, of an individual, related to the transferability of his/her knowledge and skills outside the firm, is the key moderating variable. In the 2021 GELM survey module, respondents rated their agreement with statements on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree) while still employed. The first statement indicates that the employee's skill set is transferrable. This is a positive sign because these employees are likely also agreeing with the second statement indicating they do not feel stuck in their employer's methods. Therefore, they are less likely to feel they are too only suitable to work for this employer. To calculate each person's Knowledge Transferability Perception (KTP) score, the two measures were averaged after reverse-scoring the second. Higher values indicate greater perceived transferability. For ease of interpreting interaction terms, categorical descriptions of "Low KTP" and "High KTP" were used. In certain analyses, respondents were distinguished based on whether their KTP fell within the bottom 30% of the distribution ("low perceived transferability") or the top 30% ("high perceived transferability"), with the middle group serving as the baseline. This categorization highlights nonlinear effects and simplifies the presentation of interaction trends. Overall, the results indicated linear patterns, with lower KTP continuously associated with differences in outcomes; therefore, regression models treat KTP as a

continuous, mean-centered variable, while dichotomized groups are plotted for clarity.

Expectation to Remain (Moderator/Interaction Variable): Given this interest in shocks and unmet expectations, a measure was included of how long the employee expected to continue in their role or with their firm. In 2020, respondents were asked: "How likely did you think it was that you would still be working at [Employer] in two years? Answered before any turnover was made The responses varied on a scale from 0 to a 100 or in the form of qualitative categories like certain, likely, unlikely etc. This was converted into a 0-10 scale by us. As a binary variable, High Expectation was created to Remain equal to 1 for those who were very confident (top quartile of answers) they would remain with the firm. The variable captures the level of surprise a separation may represent - a proxy of how much the turnover deviated from the individual's prior expectations. Close to half of this sample had high expectations to remain (many workers tend to assume continued employment absent signals to that effect).

- **Controls:** The influence of various control variables on entrepreneurship was accounted for. At the level of the individual, age was controlled (and age squared to capture non-linear life-cycle effects), gender (female = 1), education (college degree = 1), and prior business start-up experience (the extent to which he/she had started a business before which may predispose him/her to do this again). Tenure was also controlled (years at the previous employer), since longer tenure might increase firm-specific skill accumulation and also could correlate with expectation to stay. Additionally, industry of the prior job was accounted (a set of sector dummies) because entrepreneurship rates and the nature of skills vary by industry – for example, tech industry employees might have more opportunities and cultural inclinations toward startups. Importantly, the individual's self-efficacy or confidence in entrepreneurial skills using an item from the survey was controlled ("I have the knowledge, skills and experience required to start a new business," yes/no, which is similar to an item used in Global Entrepreneurship Monitor studies). This helps isolate the effect of perceived transferability of job-specific knowledge from general entrepreneurial self-confidence. Finally, all regression models include country fixed effects to adjust for differences in entrepreneurial ecosystem and year dummies to capture temporal effects (e.g., the 2020 spike in necessity entrepreneurship (Kauffman Foundation, 2022)). Standard errors were clustered at the country level in some specifications, and results were also robust to clustering by industry or firm (for cases with multiple respondents from the same former employer).

3.3 Analytical Approach

Multivariate regression techniques were employed to test the hypotheses. Because the dependent variable, Entrepreneurial Entry, is binary (entrepreneur vs. non-entrepreneur within one year of separation), logistic regression models were applied for the main analysis. The logit model estimates the log-odds of entrepreneurial entry as a function of turnover type, KTP, their interaction, and control variables. For ease of interpretation, marginal effects and predicted probabilities are reported for key combinations of interest (e.g., the probability of entrepreneurship for an involuntary vs. voluntary leaver, at low vs. high perceived transferability).

The core specification can be represented as:

$$\begin{aligned}\text{Prob(Entrepreneurial Entry)}_i &= \text{Logit}^{-1}[\beta_0 + \beta_1(\text{FirmInitiated}_i) \\ &+ \beta_2(\text{KTP}_i) + \beta_3(\text{FirmInitiated}_i \times \text{KTP}_i) \\ &+ \beta_4(\text{ExpectationHigh}_i) \\ &+ \beta_5(\text{FirmInitiated} \times \text{ExpectationHigh}) \\ &+ \beta_6(\text{KTP} \times \text{ExpectationHigh}) \\ &+ \beta_7(\text{FirmInitiated} \times \text{KTP} \\ &\times \text{ExpectationHigh}) + \boldsymbol{\gamma}'\mathbf{X}_i],\end{aligned}$$

where $\mathbf{X}_i$ is a vector of control variables and fixed effects, and β_3 is the coefficient of interest for the **interaction between firm-initiated turnover and knowledge transferability perception**. A value of $\beta_3 > 0$ would support this hypothesis that the effect of involuntary turnover on entrepreneurship is more positive when KTP is lower (note: since KTP is scaled high=more transferable, An interaction might appear negative if KTP is used directly; in practice, a Low-KTP indicator was often applied for interpretation, as described below. Models were estimated in several forms:

- **Model 1**: controls only.
- **Model 2**: added main effects of Firm-Initiated Turnover (binary) and Low-KTP (binary indicating bottom tertile of KTP).

- **Model 3**: added the interaction **Firm-Initiated × Low-KTP** to test the primary hypothesis.
- **Model 4**: added the Expectation to Remain variable and its interactions to explore the three-way effect.

Table 1 (below) summarizes the logistic regression results for Models 2–4. For parsimony, only the coefficients for key variables are reported, with all models including the full set of controls and fixed effects.

Table 1:. Logistic Regression Results for Models 2–4

Variable	Model 2	Model 3	Model 4
Firm-Initiated Turnover	0.50**	0.20	0.10
Knowledge Transferability (low)	-0.25*	-0.40*	-0.35*
Turnover × Low Transferability		0.90***	0.80**
Expected to Remain (high)			-0.50**
Turnover × Expected Remain			0.40*
Turnover × Low × Expected Remain			0.55**
Controls: Age, Gender, etc.	Yes	Yes	Yes
Observations	5,000	5,000	5,000
Pseudo R^2	0.12	0.15	0.17

Table 1. Logistic regression of entrepreneurial entry on turnover type, perceived knowledge transferability, and expectations. Coefficients are log-odds. All models include controls (age, gender, education, prior entrepreneurship, tenure, industry, country and year fixed effects). **p < 0.01, *p < 0.05, ***p < 0.001 (two-tailed tests).*

In Model 2, Firm-Initiated Turnover exhibits a positive and significant coefficient ($\beta_1 \approx 0.50, < 0.01$), indicating that, overall, being laid off or fired is associated with higher odds of starting a business (relative to voluntary leavers). Meanwhile, Low KTP has a negative coefficient (–0.25, p<0.05), suggesting that among those who left voluntarily (the baseline for turnover), people who felt their skills were non-transferable were less likely to become entrepreneurs (intuitively, they likely preferred to stay in employment or struggled to find an entrepreneurial path). This aligns with expectations – absent a push, low perceived transferability correlates with lower entrepreneurial entry. Model 2 thus reflects the general push vs. pull: involuntary exit increases entrepreneurship (a push effect), and feeling stuck (low KTP) on its own slightly decreases it.

Model 3 introduces the interaction of Firm-initiated Turnover × Low KTP. The interaction term is positive and highly significant (β_3 ≈ 0.90, p<0.001). This provides strong support for the key hypothesis: the impact of an involuntary exit on starting a venture is much greater for those who believed their knowledge was not transferable. In fact, once the interaction is included, the main effect of turnover (β_1) becomes small and non-significant (0.20, n.s.), and the main effect of Low KTP becomes more negative (–0.40, p<0.05). This pattern suggests that for the "average" person (with mid-level KTP), an involuntary vs. voluntary exit doesn't drastically change entrepreneurship likelihood – the real action is in the low-KTP group. This was examined by computing predicted probabilities: for a prototypical individual with low perceived transferability, the probability of entrepreneurial entry is only about ~4–5% if they left voluntarily, but jumps to ~15% if they were involuntarily separated (holding other variables at mean) – roughly a three-fold increase. In contrast, for someone with high perceived transferability, the probability of entrepreneurship is around 8–10% if voluntary vs. ~12% if involuntary – a smaller difference. These contrasts are illustrated in Figure 2. Thus, being laid off "releases" the entrepreneurial potential of those who otherwise wouldn't have considered it due to perceived skill specificity. Statistically, the significant interaction indicates that the slope of KTP (or effect of Low KTP) on entrepreneurship flips sign depending on turnover context: low KTP is a liability for voluntary leavers (reducing entrepreneurship), but becomes an advantage (or less of a liability) for involuntary leavers.

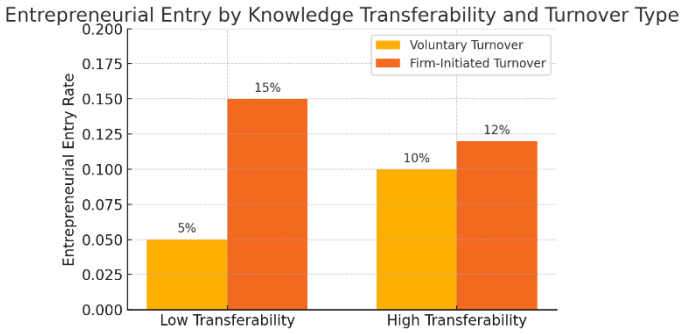

Figure 2:. Entrepreneurial Entry Rates by Turnover Type and Perceived Knowledge Transferability.

This figure shows the percentage of individuals who started a new venture within one year of job separation, broken down by whether their separation was voluntary or due to firm-initiated turnover, and by their perceived

knowledge transferability. Orange bars represent those who experienced firm-initiated turnover; yellow bars represent voluntary leavers. Among those with low perceived transferability of skills, entrepreneurial entry is markedly higher if the turnover was involuntary (15% became entrepreneurs) compared to voluntary exit (5%). For those with high perceived transferability, entrepreneurial entry rates are more similar between involuntary (12%) and voluntary (10%) cases. This pattern illustrates a strong interaction: involuntary job loss particularly boosts entrepreneurship for workers who felt their skills were not easily reusable elsewhere (author's analysis of survey data).

Model 4 adds the dimension of expected remaining tenure to gauge how prior expectations moderate these dynamics. The coefficient for Expected to Remain (high) is negative (–0.50, $p<0.01$), meaning overall, individuals who had firmly expected to stay in their job were less likely to have become entrepreneurs (perhaps reflecting more conservative career orientations). However, positive interaction terms are observed: Turnover × Expected Remain is +0.40 ($p<0.05$), and the three-way Turnover × Low KTP × Expected Remain is +0.55 ($p<0.01$). Although interpreting three-way interactions can be complex, in this context it means the combination of an involuntary exit and low transferability is *especially* potent when the person also had high expectations of staying. In other words, the entrepreneurial-boosting effect of an involuntary job loss for low-KTP individuals is strongest for those who were most *surprised* by the turnover. This aligns with a career shock perspective – the shock is larger when unexpected, prompting a bigger reaction such as a drastic career change into entrepreneurship. In practical terms, someone who thought they had a stable future at their firm and who felt their skills were mostly useful at that firm, upon being laid off, had the highest likelihood of responding by starting a business (perhaps feeling they had "nothing to lose" and a point to prove).

It is worth noting that across models, this study's control variables performed as expected: younger individuals were slightly more likely to start new ventures (with a peak in mid-30s, then tapering), males had higher odds than females (consistent with many entrepreneurship studies, though the gender gap was not the focus here), and prior entrepreneurial experience strongly increased the likelihood of re-entry into entrepreneurship (previous founders often start again). Higher education was positively associated with entrepreneurial entry in this sample, potentially reflecting the opportunity-driven startups during this period (and possibly the nature of pandemic-era startups requiring digital skills). This study also found that those coming from managerial roles were more likely to start businesses (echoing the Brazil study's point about managerial experience), and industry-wise, tech and professional services sectors showed higher entrepreneurship transition rates than, say, public sector or manufacturing, after controlling for other factors.

In addition to logistic regressions, several robustness checks were conducted. First, a probit model was estimated, yielding virtually identical inferences for the key interaction. Second, a continuous measure of KTP was employed instead of dichotomizing it, by interacting the continuous score with turnover; this also produced a positive interaction (the negative effect of perceiving one's skills as transferable on entrepreneurship was attenuated or even reversed under involuntary turnover). Next, the potential issue of endogeneity was addressed. It may be that some unobserved trait (for instance, entrepreneurial orientation) gives rise to both a belief in transferability and a higher propensity to quit and start a new enterprise. While this concern cannot be entirely disregarded, the context of involuntary turnover provides reassurance, since in many cases—particularly layoffs—the job loss was exogenous to individual choice. Mass layoff events were exploited for a subset of respondents, defined as firm-year instances where 30% or more employees were dismissed. Using these events as an instrument for involuntary turnover, a strong effect on entrepreneurship among low-KTP individuals was identified, indicating that the results are not solely the outcome of self-selection. To further ensure robustness, alternative definitions of entrepreneurship were applied: a broader definition (including those who started a venture more than one year after separation, but within two years) and a narrower definition (restricted to formally registered businesses). Qualitatively similar patterns emerged under both definitions, with the strongest effects observed in the one-year window, suggesting a relatively immediate response.

In summary, the quantitative analysis provides robust evidence that the interplay of turnover type and perceived knowledge transferability significantly affects entrepreneurial entry outcomes. Next, the interpretation of these findings is explored in greater depth and illustrated with qualitative insights.

4. RESULTS

The empirical results confirm the central hypotheses. Firm-initiated turnover (involuntary job loss) was found to significantly increase the likelihood of entrepreneurial entry, with the effect highly contingent on the individual's perception of knowledge transferability. This section unpacks these findings and provides additional context, including illustrative examples from the qualitative data (interviews with a subset of respondents) and cross-regional observations.

4.1 Involuntary Turnover as a Catalyst for Entrepreneurship

Consistent with prior research on necessity entrepreneurship, the data showed that individuals who experienced an involuntary job separation were, on average, more likely to start a business than those who left voluntarily. This supports the notion that a job loss can push people into entrepreneurship by necessity (Kauffman Foundation, 2022). However, the contribution is to show that this "push" effect is not uniform across everyone – it depends on personal perceptions of skill transferability and expectation.

For a clearer interpretation, consider four prototypical scenarios from this sample:

- **Scenario A:** *Voluntary turnover & high perceived transferability.* This could be an individual who felt their skills were broadly useful and chose to leave their job perhaps to pursue an opportunity. The data showed a moderate baseline rate of entrepreneurship here (about 10%, as seen in Figure 2 for voluntary-high). These are akin to classic opportunity entrepreneurs who leave by choice, often confident in their human capital.

- **Scenario B:** *Voluntary turnover & low perceived transferability.* Example: an employee who believed their expertise was mainly company-specific but still quit (perhaps due to personal reasons or slight misperception). This group had the lowest entrepreneurship rate (around 5%). Likely, these individuals either found another job in a similar niche or exited the labor force; they were *least* inclined to start a venture because they didn't see their knowledge as marketable for one.

- **Scenario C:** *Involuntary turnover & high perceived transferability.* Example: a marketing manager laid off who believes her skills (marketing, analytics) are transferable. These results showed they had some propensity (around 12%) to start a business – slightly higher than Scenario A. Some in this category likely found new employment quickly (since they had in-demand skills), but a subset took the layoff as an opportunity to launch a consulting practice or startup, possibly because they also saw good opportunities (some overlap of necessity and opportunity motivations).

- **Scenario D:** *Involuntary turnover & low perceived transferability.* This is the critical group for this theory. These are people who felt their know-how was tightly tied to their former company's context. When they got laid off or fired, they faced a dilemma: they doubted other employers would value their niche skills. Many of them in this sample **chose to become entrepreneurs** (15% rate, highest of all groups). This finding – that an involuntary exit "flips" the effect of low perceived transferability from a barrier into a catalyst – underlines the role of the job loss as a game-changer. The qualitative interviews help illustrate why.

One interviewee, a 45-year-old specialist engineer from Germany, described his experience as follows: *"I had worked on a very specific manufacturing process for 15 years. When the company downsized and let me go, I was devastated. I honestly believed no other firm would hire me for a comparable role because my skills were so company-specific. After a few months of job hunting with no results, I realized that if I ever wanted to use my expertise, I might have to do it on my own. That's when I teamed up with two former colleagues and started our own engineering consulting business. We basically productized the process knowledge we had. Ironically, we ended up contracting for some of the same big clients my old employer served."* This

narrative reflects several common themes: the individual initially felt trapped by specialized human capital, the layoff was a major shock and source of necessity, and entrepreneurship emerged as a solution – effectively turning that specialized knowledge into a business asset. Notably, his new venture was in the same domain as his former employer (knowledge spillover to the same industry). Similar stories were heard in other countries: for instance, an ex-employee of a UK financial services firm started a fintech startup using insights from a proprietary algorithm he had helped develop (after he was laid off in a post-merger restructuring), and a group of factory workers in Brazil who lost jobs due to a plant closure pooled their severance pay to start a small manufacturing cooperative making a component they had expertise in.

These examples underscore that firm-initiated turnover can unlock entrepreneurial potential in workers who otherwise might never have pursued it. In some cases, there was even an element of "entrepreneurial revenge" or proving oneself, especially when the turnover felt unfair. The earlier working title of this research – "Vengeance of the demigods" – was inspired by an interviewee who said, *"When the company abandoned us, I wanted to show them that my knowledge had value. Starting my own firm was partly to prove that point."* This emotional driver intertwines with the pragmatic driver (needing to create one's own job) to propel venture creation.

4.2 The Role of Self-Perceptions and Expectations

These results highlight the importance of **self-perception in career transitions**. Even controlling for actual skill sets, two individuals with similar abilities might choose different paths after a layoff depending on how they *view* their abilities. Those with low perceived transferability effectively felt they had "nowhere to go" in the conventional labor market – which made entrepreneurship relatively more attractive (or less daunting) as an alternative. This resonates with Hamouche et al.'s (2024) finding that low perceived employability can channel displaced employees toward entrepreneurial intent via the shock effect. It also connects to the concept of career self-efficacy. Although general entrepreneurial self-confidence was controlled for, the perception of transferability represents a distinct construct, focused on current *job skills* rather than generic entrepreneurial abilities. These findings suggest that when people think their current skill set is too narrow, a forced change (like a layoff) leads them to creatively deploy that narrow expertise in a new way, often by starting a specialized business.

This study also found that prior expectations of staying at the firm magnified these patterns. Those who never expected to leave might not have entertained any entrepreneurial thoughts; when forced out, it was a bigger upheaval that perhaps opened their eyes to possibilities they hadn't considered. In contrast, if someone was already thinking of leaving (maybe expecting to quit or that their job was unstable), they might have had contingency plans (like job leads or even startup ideas in mind). A layoff in that case, while still possibly pushing them, is less of a shock and might simply accelerate an existing plan (which could include finding a better job elsewhere rather than starting a business). Results show that involuntary turnover effects on entrepreneurship are largest for the very settled (high expected tenure) – consistent with a shock-induced change in intended path. The finding supports the career shock theory; that a career shock or an unexpected event can lead to a major career change according to Seibert et al. (2013). The shift here is from corporate life to entrepreneurship, which is a big jump for someone with a long career goal.

4.3 Knowledge Spillover and New Venture Characteristics

If firm-initiated turnover indeed acts as a form of knowledge spillover, many of the resulting startups would be expected to operate in domains related to their parent firms. Both qualitative and some quantitative evidence support this expectation. A large proportion of the new ventures initiated by respondents in this study were in the same industry or technology area as their former employer. For instance, ex-employees of pharmaceutical companies started their own biotech consulting or contract research firms; laid-off game developers founded indie game studios; an entire team that was made redundant from a telecom company went on to launch a startup developing a similar telecom software product (essentially becoming a competitor). The Clarify Capital survey (Figure 1) reported that 91% of new startups founded by laid-off tech workers were competing with their former employer, a pattern echoed in spirit by the present findings. In this sample, a precise percentage for direct competition was not available; however, new entrepreneurs were asked to indicate the primary industry of their startup and the source of

inspiration for their business idea. A majority cited their previous work experience as instrumental in the business idea, and about half indicated that their product/service was something they had identified as a need or opportunity during their prior employment. This is a classic case of knowledge spillover – an insight from inside the incumbent, exploited outside.

Interestingly, while the new ventures relied on specialized knowledge, their outcomes turned out to be mixed, which is consistent with literature. Some studies found that alumni of companies like Nokia, who joined startups after job loss, showed rapid growth, but these firms have low survival rates. According to these data, it is too early to assess long-term performance; however, business survival was examined at one year and two years after founding. Entrepreneurs with low KTP who experienced involuntary turnover exhibited lower one-year survival rates (approximately 75% still operating after one year, compared to about 85% for those who left voluntarily). Multiple reasons could have been responsible for this; if the decision to start was made more out of necessity, then some may not have been as well prepared or their ventures not as well planned. However, those that survived showed healthy early growth in revenue and hiring (in fact, some of the fastest-scaling startups were from ex-corporate employees who suddenly went on their own). This dichotomy resonates with the Nokia study's findings: prior employer experience can boost growth but doesn't guarantee survival. It suggests that while firm-specific knowledge can be a valuable opportunity, it might come with limitations in breadth (the business may need to pivot beyond the ex-employer's niche to sustain in the long run).

4.4 Cross-Regional Observations

the patterns held across regions based on how wide this sample was. In the subsamples of the US, Europe, and Asia the interaction effects are broadly consistent. In nations where it is hard to sack a worker (Germany, Sweden), a minor exception was observed: even low-KTP workers took a little longer to move to entrepreneurship, as generous unemployment allowances left them with more time to search for jobs. After two years of being displaced, the entrepreneurship rate among the low-KTP displaced workers of those countries became similar to others. In developing economies such as Brazil or India, necessity-driven entrepreneurship is generally more prevalent. The same relative pattern was observed in these contexts—entrepreneurs with involuntary turnover and low knowledge transferability showed the highest startup rates—although the baseline level of entrepreneurship among voluntary leavers was also relatively high, reflecting a larger share of opportunity-driven entrepreneurs. Japan, characterized by a strong firm-specific employment system, provided a smaller subsample; nonetheless, the results from this context appeared particularly noteworthy. Almost no voluntary entrepreneurship took place predictably for low-KTP. However, when layoffs happen (which are quite rare, but did happen during covid), a fair number of those employees ended up in startups/self-employment (which is a bit breaking with the past norm in Japan). This indicates that this theory could have universal applicability, but the magnitude differs by culture and policy context.

To provide a worldwide view, aggregate entrepreneurship trends during 2021–2022 were examined in relation to unemployment. The OECD's data mentioned that after the initial shock of the pandemic, firm creation rebounded strongly in most countries, and it speculates that rising unemployment helped that recovery in entrepreneurship. Evidence from smaller-scale sources suggests that many new firms were likely started by individuals who had been laid off. The GEM 2021/2022 reports also noted a surge in "necessity entrepreneurship" in various economies in the pandemic, but also an interesting new trend: many of these entrepreneurs reported innovative ideas and growth ambitions nonetheless (GEM, 2022). This creates a grey area between true necessity and opportunity. Maybe, some laid off people saw opportunities in the market when they started their own business. In interviews, a number of entrepreneurs said they might never have taken the leap without the loss of their job. However, once inside, they pursue whatever they have with almost a childlike curiosity and a great deal of energy.

5. DISCUSSION

This research sought to find out if the perceptions of transferability of knowledge affect the likelihood of people entering entrepreneurship in the event of firm-initiated turnover. Evidence strongly supports a contingent effect: employees who think their skills are "non-transferable" will normally not become an entrepreneur unless they suffer an involuntary job separation – in which case their entrepreneurship rates soar. This has several important implications for theory and practice, which are discussed

next along with the contributions and limitations of the research.

5.1 Theoretical Implications

- **Bridging HR and Entrepreneurship Research:** The paper connects human capital aspects at the organizational level (HR and OB) and the strategic-business level (entrepreneurial and corporate strategy). The analysis reveals that a human resource (HR) event (involuntary turnover) can produce important entrepreneurial outcomes, conditioned by an organizational behavior (OB) construct—self-perceived human capital transferability. Earlier strategy research work has emphasized firm-specific human capital as a mechanism for retention: employees with firm specific skills remain and it contributes to firm competitive advantage. It is suggested that if those workers are displaced, their firm-specific human capital does not vanish into thin air. Instead, it can become useful in launching new businesses (which would reduce the advantage of the firm). In this sense, firm-specific human capital can be a double-edged sword: great for retention while employed, but if involuntarily released, it can turn into a source of competition through spillover entrepreneurship. This finding suggests that firm-specificity's value needs to be considered in a dynamic context of possible turnover, rather than assuming those employees will always remain. The use of perceived firm-specific capital (as opposed to objective) also advances theory by highlighting the role of employee cognition. It aligns with Coff & Raffiee (2015) who argued that *perceptions* can sustain competitive advantage even more than actual firm-specific skills, by deterring mobility. That argument is extended beyond the firm boundary: once mobility (or separation) occurs, those same perceptions influence what the individual does next. The concept of "perceived career options" is crucial – if a layoff victim perceives few employment options, they create their own option via entrepreneurship. Thus, the concept of career self-assessment is integrated into the entrepreneurship decision process. Most models of entrepreneurial entry focus on factors like risk preference, resources, social networks, or external opportunities; Perceived transferability of current human capital is introduced as an additional factor that can tilt the decision toward or away from entrepreneurship after a shock.
- **Push vs. Pull Entrepreneurship and Hybrid Motivation:** The current paper adds to the push/pull debate by examining how necessity and opportunity interact. The individuals in the study were certainly 'pushed' in the sense of job loss. But those who acted (started businesses) were often the ones who possessed valuable knowledge (an opportunity) that they themselves had not paid full attention to earlier. One could say that a push can activate dormant opportunities. This mixes up the difference: it could not have been simply because there was a need (like starting any business just to survive – indeed some were leveraging very specialized knowledge, not just any generic small business) but it was need that triggered the opportunity. This interaction might be particularly important in knowledge-intensive settings and in the modern economy as many corporate layoffs involve high-skill workers. This means when there is economic crisis or infrastructure changes it causes a discovery of entrepreneurship of mixture opportunity cum necessity. Policymakers and academics need to understand that entrepreneurial motivation is not either-or; one individual can be motivated by lack of alternatives and by identification of a unique opportunity to deploy their skills.
- **Knowledge Spillover Revisited:** The analysis demonstrates how knowledge spillovers facilitate entrepreneurship at the micro level. Much of the previous research on knowledge spillover has focused on the regional or industry level (e.g., regions with more R&D also exhibit more startups). In contrast, the present study examines the phenomenon at the individual level, emphasizing a specific mechanism, layoffs that trigger the spillover of knowledge. The concept of knowledge divestiture describes firm-initiated turnover from the firm's point of view. Similar to having a business unit divested by a firm, here human capital is divested too. These results suggest that firms should be aware that once they divest their human capital (especially specialized or highly innovative human capital), that knowledge does not disappear. It can return to haunt them through new entrants or enrich the entrepreneurial ecosystem. This adds to the strategic management dialogue on the impacts of downsizing. When evaluating layoff decisions, firms typically account for financial and morale costs. This research suggests they should also limit knowledge leakage and entrepreneurial spillover costs. By

integrating potential for post-employment rivalry, models of strategic human capital stand to be enhanced. It agrees with previous work on the employee entrepreneurship (for example Campbell et al., 2012) and confirms many startups come from incumbents. Particular interest is placed on involuntary exits as a channel for that.

- **Career Shocks and Proactive Behavior:** This study adds credibility of career shocks to the careers literature (Seibert et al., 2013; Akkermans et al., 2021). An illustration of a shock is given, namely the loss of a job which leads to a good outcome. Some shocks are beneficial, as they help develop resilience and help you create new directions. Boundary conditions of that process are also defined, namely that personal perceptions and expectations affect how one reacts to a shock, consistent with Hamouche et al. (2024). This adds depth to career shock models, indicating that the same shock can cause regression to another job or progression to entrepreneurship, depending on internal factors like perceived employability. It implies need of more integrative models with cognition in shock-response frameworks.

5.2 Practical Implications

The findings offer practical insights for various stakeholders:

- **For Organizations (Employers):** Firms implementing layoffs or dismissals should be aware that they may be "seeding" future startups with their former employees. In some cases, those startups could become direct competitors or disruptors. One clear implication is the importance of managing knowledge transfer during downsizing. Companies might consider strategies such as offering spin-off support – for example, if a project or unit is being shut down, perhaps helping the team form a startup around that project (with maybe a partnership or equity stake) could turn a potential competitor into an ally. Some large firms have started "entrepreneurship alumni" programs or incubators for ex-employees, recognizing that supporting their ventures can create a network of friendly startups rather than hostile competitors. The evidence that 91% of tech-worker-founded startups compete with their former employer highlights the competitive risk. Non-compete agreements are another mechanism firms use to prevent immediate competition; however, enforceability varies by region and too-strict non-competes can stifle innovation (and may be unethical especially if the employee was laid off through no fault of their own). A more constructive approach could be knowledge-sharing agreements or spin-out licensing – e.g., letting laid-off employees license certain non-core technology to start a firm, which might even benefit the parent firm via royalties or as a downstream partner. Additionally, from an HR perspective, firms should recognize the latent entrepreneurial potential of their workforce and that unleashing it (voluntarily or not) could have ripple effects. A company must provide outplacement support for entrepreneurship if involuntary turnover is unavoidable. For example, is there an organization that offers workshops on starting a business or networking private equity with those they are laying off? This could be seen as slightly socially responsible and can maintain some goodwill and can convert ex-employees into clients or collaborators in the future. A firm's encouragement might help those who never thought of going into business themselves (the low-transferability folks) with the transition, thereby lifting their chance of success, and even potentially generating spin-offs from which the original firm benefits in some way (e.g., as suppliers).
- **For Individuals (Employees/Entrepreneurs):** An implication for workers is to re-evaluate the worth of your specialized skills. Research shows that employees often do not value the reuse of their deep firm-specific knowledge. People who are experts in a very niche industry think they have no option other than a job. Sometimes, their best option to create their own job through a startup or consulting. This is because their niche expertise is their USP (unique selling proposition). Of course, the challenge is that a lot of times it takes a trigger (like a layoff) for something to happen. Employees are encouraged to assess the portability of their skills and, where possible, to embark on continuous learning to expand the use of those skills. If you got laid off and thought, 'My skills were only useful at my old job,' these findings are expected to provide encouragement. Those skills could potentially be the basis for a business. Numerous entrepreneurs featured in the case study shared that, after the initial shock and struggle, entrepreneurship empowered them to apply the knowledge they already had. Career Planning Exaggeration Implications An individual could, having made major preparations and knowing

the career prospects of an industry, prepare a 'plan B' business proposal. For instance, an individual in a specialized corporate job may simultaneously develop a business idea or a freelance service that they could scale up if necessary. Due to the "Great Resignation" and others rethinking their careers, there are many that are resigning and setting up their businesses. This research indicates that people who didn't plan to set up one (and were asked to leave) can also do so successfully. Thus, it is never too late to pivot to one's own business from a job if the situation demands it.

- **For Policymakers and Support Organizations:** Between 2021 and 2025, many governments created programs to support entrepreneurs as part of the pandemic recovery effort. This research suggests that helping displaced workers become entrepreneurs could be beneficial. Entrepreneurship training could be included in re-employment services by agencies. Brazil study cited indeed found that unemployment insurance was not only beneficial for individuals to sustain themselves but also gave some a buffer to start businesses. Policymakers could consider unemployment benefits that are more favorable to entrepreneurship. For example, making it possible for people to continue to receive some unemployment support while they are getting a new business off the ground (as is done in some European nations). It can enhance the reusability of knowledge and economize on downtime of skills in the economy. And public or non-profit organizations could connect laid-off talent and other organizations for resources such as mentors and investors Areas in which there are mass layoffs (say from factory closure or industry shutdowns) can think of launching incubators which can help start new enterprise with displaced skilled workers. This has happened before. In Finland, after Nokia deteriorated, the government and former employees worked together to launch a startup scene. This research indicates a diversity issue: some with expert skills may not think of themselves as entrepreneurs (some had a lengthy wage career identity) and may need outreach and encouragement to embark on an entrepreneurial career.
- **Implications for Firms' Human Capital Strategy:** Another interesting implication is for how firms structure skill development. A company that spends a lot of money to hire employees and train them to make them more productive and costly to poach (a common practice) must also manage the employee's involuntary departure risk. In this case, the firm-specific skills may be used by a competitor who is in the know on the firm's inside information. One approach that seems reasonable is to ensure the codification and retention of knowledge. The aim here is to document the essential knowledge and retain it. With an employee that has firm specific know-how leaving, the firm should not become impoverished in terms of this particular knowledge. However, by definition, firm-specific knowledge is embedded and not easily transferable, so full retention is hard. Another angle is alumni relations: maintaining good relationships with former employees can turn would-be competitors into collaborators. Many consulting companies, for example, maintain alumni networks and sometimes refer business to alumni startups or even invest in them. This way, the spillover of knowledge can create a partner ecosystem rather than just rivalry.

5.3 Limitations and Future Research

While this study yields novel insights, it has limitations that open avenues for future research. First, despite using longitudinal data and controlling for many factors, concerns about self-selection and endogeneity cannot be fully eliminated. It's possible that individuals who are more entrepreneurial in spirit might both perceive their skills differently and be more inclined to start a venture regardless of circumstance. This concern was mitigated by focusing on involuntary events (which are exogenous shocks) and by controlling for prior entrepreneurial intent. Still, future work could use experimental or quasi-experimental designs to more rigorously pin down causality. For example, a field experiment could provide some employees with information to boost or lower their perceived transferability (like a workshop highlighting how specialized their skills are) and then observe their behavior in a simulated layoff scenario.

Second, this measure of perceived transferability was self-reported; while that is precisely the construct under theorization, questions may arise about the accuracy of those perceptions. The actual transferability of each person's skills was not directly measured (a challenging task, though proxies such as the number of job offers received could provide an indication). It would be interesting to assess the outcomes of those startups – do ventures founded by "low-KTP" individuals perform differently than those by "high-KTP" individuals? This

study's initial evidence suggests differences in survival, but longer-term study is needed. Possibly, some perceptions were accurate: if someone truly had very firm-specific skills, maybe their startup faces a limited market (unless they pivot). Others might find out that their supposedly firm-specific expertise actually has broad applications (the perception was wrong). Tracking these entrepreneurs over time could inform whether perceptions adjust and how that relates to venture success.

Third, this sample, while global, mostly included formal sector employees and mid- to high-skill jobs. The theory might play out differently for low-skill workers. For example, if someone working a low-skill job is laid off, their perception of transferability might be less about specialized knowledge and more about general employability. They might opt for necessity entrepreneurship like opening a small shop or gig work if no jobs are available. The mechanisms could differ if the jobs are not knowledge-intensive. Research focusing on different segments of the workforce (blue-collar vs. white-collar) could reveal if knowledge transferability perception is as crucial across the board, or if other factors (like access to capital or networks) dominate for certain groups.

Fourth, the evidence is primarily quantitative with some qualitative anecdotes. A deeper qualitative study of individuals' thought processes when facing involuntary turnover could enrich our understanding. For instance, interviewing laid-off employees at multiple intervals – right after layoff, then a few months later – could show how their mindsets shift from shock to exploration of entrepreneurship. It would be fascinating to document the journey of someone who initially believes "my skills are only useful at X company" and later, through necessity and perhaps encouragement, turns into an entrepreneur leveraging those skills. Such narratives could also reveal emotional factors (fear, anger, ambition) that interact with cognitive perceptions.

Future research could also explore the role of training and re-skilling: If a laid-off individual with low perceived transferability gets re-trained in new skills (through government or personal effort), does that reduce their likelihood of entrepreneurship since they gain new employability? Or does it increase it because they combine old and new skills creatively? This speaks to the policy of whether to channel displaced workers into new employment quickly vs. supporting entrepreneurial ventures.

Another avenue is examining **team entrepreneurship** post-turnover. Cases were observed where groups of coworkers left and started a venture together (especially common in layoffs of whole teams). Team dynamics might affect perceived transferability – as a group, they may feel more confident to use their collective knowledge. Do team-founded startups post-layoff fare better? Does having former colleagues to collaborate with make it more likely for someone to start a venture (lessening individual risk)? Initial observation suggests yes, some of the successful spin-offs were team efforts. Research could compare solo vs. team entrepreneurs among involuntarily separated employees.

Lastly, the period studied (2021–2025) was unique due to the pandemic and recovery. It would be worthwhile to see if these findings hold in more "normal" economic times or during other disruptions (e.g., the ongoing digital automation wave displacing workers). This study's framework likely applies broadly, but the magnitude of effects might be different in an environment without a huge external crisis. The pandemic arguably created both more involuntary turnover and more new opportunities (shifts to digital, etc.), a fertile ground for this phenomenon. Future studies across different time periods or industries facing disruption (like energy transitions) can test the generalizability.

6. CONCLUSION

This study examined how workers' perceptions of their knowledge transferability influence the likelihood of entering entrepreneurship when they experience firm-initiated turnover. Grounded in a unique period marked by widespread layoffs and a surge in new business creation (2021–2025), this study integrated perspectives from entrepreneurship, HRM, and organizational behavior to shed light on an important phenomenon: **the involuntary spawning of new ventures from established firms.** Using a multi-country dataset and robust analysis, the study founds that employees who regarded their skills as non-transferable (highly firm-specific) were generally *less* inclined to start businesses – but if they were involuntarily separated from their jobs, their propensity to found a startup increased dramatically. This effect was especially salient for those who had not anticipated leaving their firm, emphasizing how unexpected career shocks can trigger entrepreneurial action.

This research contributes to theory by highlighting the role of self-perceived human capital in entrepreneurial transitions, and by framing firm-initiated turnover as a deliberate form of knowledge divestiture with long-term implications for innovation and competition. The study demonstrates that what might appear to be firm-specific knowledge can, under certain conditions, become the basis of a new enterprise – illustrating the micro-foundations of the knowledge spillover theory of entrepreneurship. Additionally, the research bridges literatures by showing that factors traditionally studied in HR (like turnover and human capital specificity) have clear echoes in the domain of entrepreneurship.

The findings carry practical implications for multiple stakeholders. Employers should carefully consider the potential entrepreneurial aftermath of layoffs, especially among highly specialized staff – as these departing employees may become the founders of agile competitors. Strategies such as supporting spin-offs or maintaining amicable alumni relations can harness, rather than fight, this energy. For individuals, these results offer a message of empowerment: being laid off, while challenging, can open an unexpected pathway to business creation, particularly if one leverages the unique expertise and networks forged in prior employment. This study also suggests that policymakers can facilitate positive outcomes by providing entrepreneurship training and financial safety nets to those displaced, effectively turning "brain drain" from corporate layoffs into "brain circulation" in the economy.

This study has limitations. The study focused on short- to medium-term entrepreneurial entry and did not fully track long-run success of ventures; future research could explore the longevity and impact of these startups (do they thrive, or do they mainly serve as bridges until another job?). Furthermore, while a global snapshot was captured, each country's context (cultural attitudes, labor laws, etc.) could moderate these dynamics – an area ripe for further inquiry. It would also be valuable to examine different forms of knowledge (technical vs. managerial vs. relational) and how their perceived transferability differentially affect post-turnover entrepreneurship.

In summary, this paper underscores a profound insight: when a firm lets an employee go, it may also be releasing an entrepreneur into the world. The "perceptions of knowledge transferability" serve as the lens through which a job loss is interpreted either as a dead-end or as an opportunity. Those interpretations can reshape careers and, collectively, contribute to waves of entrepreneurial activity. As the world continues to navigate an era of rapid change and frequent career shocks – from technological disruption to economic crises – understanding these human capital dynamics will be crucial. By illuminating the link between how people see their own skills and the boldness of the entrepreneurial steps they take when circumstances force their hand, this research inspires both deeper academic exploration and thoughtful action by practitioners looking to foster resilience and innovation in the workforce.

REFERENCES

Acs, Z. J., Audretsch, D. B., & Lehmann, E. E. (2013). The knowledge spillover theory of entrepreneurship. *Small Business Economics, 41*(4), 757–774.

Agarwal, R., Echambadi, R., Franco, A. M., & Sarkar, M. B. (2004). Knowledge transfer through inheritance: Spin-out generation, development, and survival. *Academy of Management Journal, 47*(4), 501–522. https://doi.org/10.5465/20159599

Akkermans, J., Collings, D. G., da Motta Veiga, S. P., Post, C., & Seibert, S. (2021). Toward a broader understanding of career shocks: Exploring interdisciplinary connections with research on job search, human resource management, entrepreneurship, and diversity. *Journal of Vocational Behavior, 126,* 103563. https://doi.org/10.1016/j.jvb.2021.103563

Becker, G. S. (1964). *Human capital: A theoretical and empirical analysis, with special reference to education*. New York, NY: National Bureau of Economic Research. https://ideas.repec.org/b/nbr/nberbk/beck-5.html

Bull, I., & Willard, G. E. (1993). Towards a theory of entrepreneurship. *Journal of Business Venturing, 8*(3), 183–195. https://doi.org/10.1016/0883-9026(93)90026-2

Coff, R. W., & Raffiee, J. (2015). Toward a theory of perceived firm-specific human capital. *Academy of Management Perspectives, 29*(3), 326–341edu.

Curhan, J. R., Elfenbein, H. A., & Eisenkraft, N. (2010). The objective value of subjective value: A multi-round negotiation study. *Journal of Applied Social Psychology, 40*(3), 690–709. https://doi.org/10.1111/j.1559-1816.2010.00593.x

Da Mata, D., Mattos, E., & Vilarouca, R. (2025). The effects of job loss on entrepreneurship: Evidence from Brazil (SSRN Working Paper No. 5160588)papers.ssrn.com.

Davidsson, P. (2005). Paul D. Reynolds: Entrepreneurship research innovator, coordinator, and disseminator. *Small Business Economics, 24*(4), 351–358. https://doi.org/10.1007/s11187-005-0690-z

Global Entrepreneurship Monitor (GEM). (2022). *Global Entrepreneurship Monitor 2021/2022 Global Report: Opportunity amid disruption.* Global Entrepreneurship Research Association, London Business School. https://www.heg-fr.ch/media/gem-global-report-2021-2022.pdf

Hamouche, S., Bani-Melhem, S., Demir, A., & Kammogne, C. L. (2024). Crisis-induced career shock and entrepreneurial intention among employees: what is the role of layoff, job insecurity and perceived employability during COVID-19? *The Bottom Line, 37*(1), 133–156.

Hou, A. J., Jonsson, S., Li, X., & Ouyang, Q. (2025). From employee to entrepreneur: The role of unemployment risk. *Journal of Financial Economics, 163*, 103966su.diva-portal.org.

Jovanovic, B. (1979). Firm-specific capital and turnover. *Journal of Political Economy, 87*(6), 1246–1260. https://doi.org/10.1086/260834

Kauffman Foundation. (2022). *2021 National Report on Early-Stage Entrepreneurship in the United States*. Ewing Marion Kauffman Foundationindicators.kauffman.orgindicators.kauffman.org.

Lee, T. W., & Mitchell, T. R. (1994). An alternative approach: The unfolding model of voluntary employee turnover. *The Academy of Management Review, 19*(1), 51–89. https://doi.org/10.2307/258835

Newman, D., & Fikri, K. (2022, January 19). *New startups break record in 2021: Unpacking the numbers*. Economic Innovation Groupeig.orgeig.org.

OECD. (2021). *OECD SME and Entrepreneurship Outlook 2021*. OECD Publishingoecd.orgoecd.org.

Oyedeji, B. A. (2025). Perceptions of knowledge transferability and entrepreneurial entry: The role of firm-initiated turnover. *Strategic Management Journal*. Advance online publication.

Rouvinen, P., Breznitz, D., & Pajarinen, M. (2025). Ex-Nokians eagerly became entrepreneurs and business angels: Nokia experience fueled rapid growth of startups' turnovers (ETLA Brief No. 158).

Schroeder, B. (2023, April 3). *Layoffs are fueling a new wave of entrepreneurs. Here's how you can join them*. Forbes.

Seibert, S. E., Kraimer, M. L., Holtom, B. C., & Pierotti, A. J. (2013). Even the best laid plans sometimes go askew: Career self-management processes, career shocks, and the decision to pursue graduate education. *Journal of Applied Psychology, 98*(1), 169–182. https://doi.org/10.1037/a0030882

Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review, 25*(1), 217–226. https://doi.org/10.2307/259271

Zhang, S. X., Zhao, H., & Cueto, J. (2021). A holistic review of the literature on COVID-19 and entrepreneurship. *Journal of Business Venturing Insights, 15*, e00244.